

EBILLING AND INVOICE SYSTEM

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Abstract: - Products are considered as the business resources for the organization. This includes managing the product with appropriate way to review any time as per the requirement. Therefore it is important to have a computer based IMS which has the ability to generate reports, maintain the balance of the stock, details about the purchase and sales in the organization. Before developing this application, we came up with 2 Inventory Management System existing in the market, which helps to give the knowledge for the development of our project. This application software is only used by the large organization but so we came up with the application which can be used by the small company for the management of their stock in the production houses. After analyzing the other inventory management system, we decided to include some of common and key features that should be included in every inventory management system. So we decided to include those things that help the small organization in a way or other.

1. INTRODUCTION

1.1 Introduction to E-Billing and Invoice System

The project E-Billing and Invoice System is a complete desktop based application designed on .Net technology using Visual Studio Software. The main aim of the project is to develop E-Billing and Invoice System Model software in which all the information regarding the stock of the organization will be presented. It is an intranet based desktop application which has admin component to manage the inventory and maintenance of the inventory system. This desktop application is based on the management of stock of an organization. The application contains general organization profile, sales details, Purchase details and the remaining stock that are presented in the organization. There is a provision of updating the inventory also. This application also provides the remaining balance of the stock as well as the details of the balance of transaction. Each new stock is created and entitled with the name and the entry date of that stock and it can also be updated any time when required as per the transaction or the sales is returned in case. Here the login page is created in order to protect the management of the stock of organization in order to prevent it from the threads and misuse of the inventory.

1.2 OBJECTIVES

1.2.1 Primary objective

The primary objective of the project is mentioned below:

To know the fundamentals of the .Net Technology and Visual Studio with the .Net Framework

1.2.2 Secondary objective

The secondary objectives of this project are mentioned below:

- To develop an application that deals with the day to day requirement of any production organization
- To develop the easy management of the inventory
- To handle the inventory details like sales details, purchase details and balance stock details.
- To provide competitive advantage to the organization.
- To provide details information about the stock balance.
- To make the stock manageable and simplify the use of inventory in the organization

1.3 PROJECT CATEGORY

This project is aimed at developing a desktop based application named Inventory Management System for managing the inventory system of any organization. The Inventory Management System (IMS) refers to the system and processes to manage the stock of organization with the involvement of Technology system. This system can be used to store the details of the inventory, stock maintenance, update the inventory based on the sales details, generate sales and inventory report daily or weekly based. This project is categorizing individual aspects for the sales and inventory management system. In this system we are solving different problem affecting to direct sales management and purchase management. Inventory Management System is important to ensure quality control in businesses that handle transactions revolving around consumer goods. Without proper inventory control, a large retail store may run out of stock on an important item. A good inventory management system will alert the wholesaler when it is time to record. Inventory Management System is also an important means of automatically tracking large shipment. An automated Inventory Management System helps to minimize the errors while recording the stock.

So, this project falls under the **project category** of **RDBMS** and also follows **OOPS** concept.

RDBMS

RDBMS stands for Relational Database Management System. RDBMS data is structured in database tables, fields, and records. Each RDBMS table consists of data table rows. Each database table row consists of one or more database table fields.

OOPS

OOPS stands for Object Oriented Programming. OOPS is a way of developing software using objects. It is a programming paradigm that uses “objects” – data structure consisting of data fields and methods together with their interactions, to design applications & computer programs. Programming techniques may include features such as information hiding data abstraction, encapsulation, modularity, polymorphism, method overloading, method overriding & inheritance.

4. PROBLEMS, REQUIREMENT, PLANNING, SCHEDULING

4.1 Problem Statement

After analyzing many existing IMS we have now the obvious vision of the project to be developed. Before we started to build the application team had many challenges. We defined our problem statement as

- TO MAKE DESKTOP BASED APPLICATION OF IMS FOR SMALL ORGANIZATION.
- TO MAKE THE SYSTEM EASILY MANAGED AND CAN BE SECURED.
- TO COVER ALL THE AREAS OF IMS LIKE PURCHASE DETAILS, SALES DETAILS AND STOCKMANAGEMENT.

4.2 Requirement

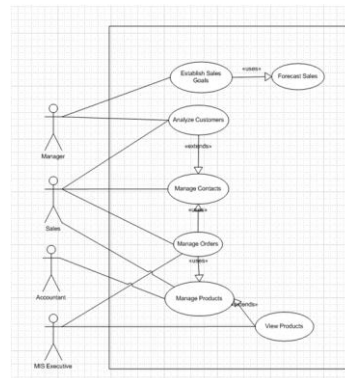
The following user types are expected for the Inventory Management System:

User	Brief Description of Use Actions
Sales Representative	Downloads and uploads customer and order information, which affects accounting, inventory and product data. View customer and product data as described in metrics, track orders and deliveries.
Manager	All sales representative use actions, and management reports, quota establishment, reporting and adjustment.
Accountant	View and print stocks, track orders. Update product details like price.
MIS Executive	Generate reports, view and print inventory reports, view and print stock reports.

Usage Summary

Inventory Management System Version 1.0 will address the following use cases. The complete usage scenarios will be completed during the information-gathering process. Use cases will be created and prioritized. Selected use cases will be expanded into usage scenarios and features that are derived from both use cases and the usage scenarios, as represented in the following diagram.

Usage summary case



4.3 Planning

4.3.1 Pert Chart

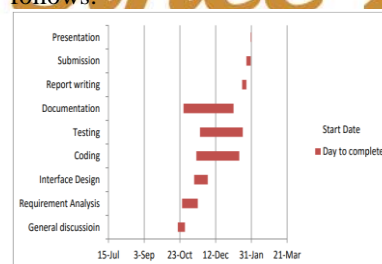
The Program Evolution and Review Technique (**PERT**) is a network model that allows for randomness in activity completion times. It has the potential to reduce both the time and cost required to complete a project. PERT originally was an activity on a network, in which the activities are represented on the lines and milestones on the nodes.

4.3.2 Gantt chart

Specific details are decided before carrying out the plan, as well as organizing the steps of the plan.

A Gantt chart provides a graphical illustration of a schedule that helps to plan, coordinate, and track specific tasks in a project.

Gantt or Time Line Chart represents the development plan. It includes the tasks versus the time the project will take to complete. The development plan of “Online Attendance and Fees Tracking”, web application is shown as Gantt Chart as follows:



4.3.3 Scope of the Application

Inventory Management System (IMS) is targeted to the small or medium organization which doesn't have many Go down or warehouses i.e. only to those organizations that has single power of authority. Some of the scope are:

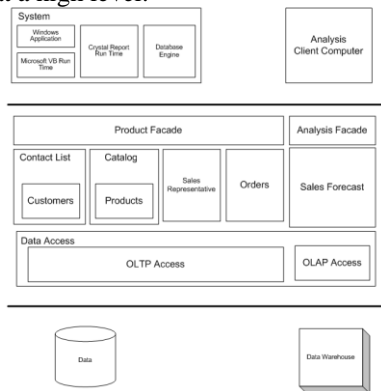
- Only one person is responsible in assigning the details or records.
- It is security driven.
- Go down can be added as per the requirement.

4.4 Schedule Feasibility

The organized schedule for the development of the system is presented in the schedule sub-section. The reasonable timeline reveals that the system development can be finished on desired time framework.

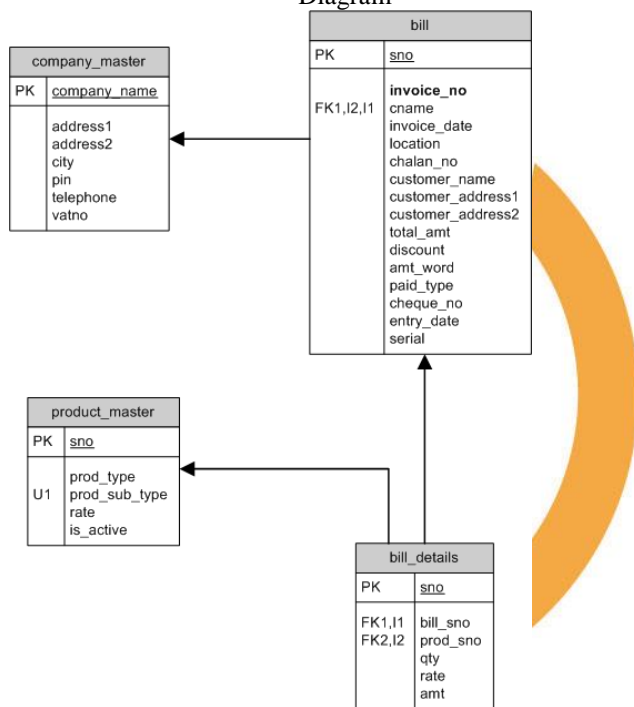
5.ANALYSIS

The following diagram describes the proposed solution architecture at a high level.



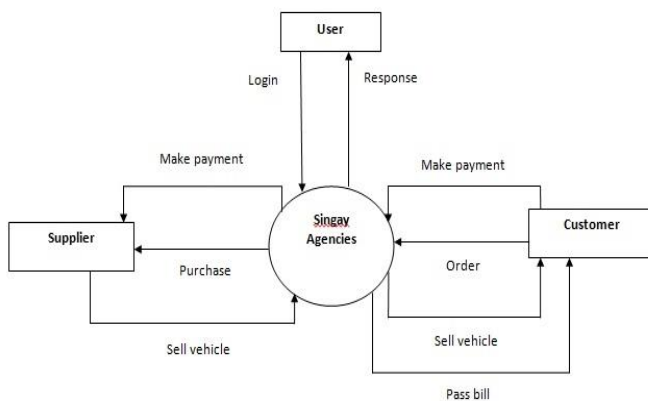
High Level Solution Architecture

5.1 Inventory Management System – Data Schema ER Diagram

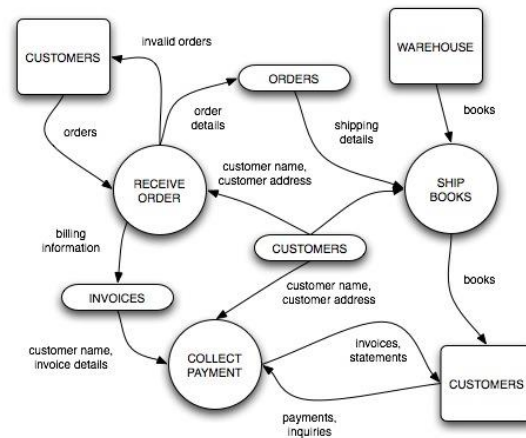


5.2 DFD Diagrams

Level-0



Level – 2



Future Enhancements

Since this project was started with very little knowledge about the Inventory Management System, we came to know about the enhancement capability during the 37 process of building it. Some of the scope we can increase for the betterment and effectiveness our listed below:

- Interactive user interface design.
- Manage Stock Godown wise.
- Use of Oracle as its database.
- Online payment system can be added.
- Making the system flexible in any type.
- Sales and purchase return system will be added in order to make return of products.
- Lost and breakage.

8. Bibliography

Software Reference

- Swatik Accounting and Inventory Software High-tech Software, Kalimati
- Inventory Management Software Sagar International, Balkhu

Website

Visual Studio Official Site:
<https://msdn.microsoft.com/en-us/library/dd492171.aspx>